AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-2. (Canceled).

3. (Currently amended) A method for detecting a protease in a biological sample, said method comprising:

(1) contacting one of two or more substantially continuous slices of a biological sample with a dried thin membrane which comprises a protease substrate together with a cross-linking agent formed on a surface of a support, wherein said cross-linking agent is a vinylsulfonic acid-type cross-linking agent;

(2) contacting the remaining slices with a dried thin membrane which comprises a protease substrate, a cross-linking agent, and a protease inhibitor formed on a surface of a support, wherein said cross-linking agent is a vinylsulfonic acid-type cross-linking agent;

(3) detecting traces of digestion formed on the dried thin membranes by the action of protease; and

(4) comparing the trace of digestion on the dried thin membrane used in step (1) with the trace of digestion on the dried thin membrane used in step (2).

4. (Canceled).

5. (Currently amended) A method for detecting a protease in a sample, said method comprising:

(1) contacting a sample with a dried thin membrane which comprises at least the following two layers: layer (a) which contains a protease substrate, a cross-linking agent, and a protease inhibitor formed on a surface of a support, and layer (b) which contains a protease substrate and a cross-linking agent laminated on layer (a), wherein said cross-linking agent is a vinylsulfonic acid-type cross-linking agent;

(2) detecting traces of digestion formed on the dried thin membrane by the action of protease; and

(3) comparing the trace of digestion on layer (a) with the trace of digestion on layer (b).

6.-20. (Canceled)

21. (Currently amended) The method of claim 3, wherein said cross-linking agent is selected from the group consisting of ~~chrome alum, chromium acetate, formaldehyde, glyoxal, glutaraldehyde, dimethylolurea, methyloldimethylhydantoin, 2,3-dihydroxydioxane, carbenium, 2-napthalenesulfonate, 1,1-bispyrrolidino-1-chloro-, pyridinium, 1-morpholinocarbonyl-3-(sulfonatoaminomethyl)-,~~ 1,3-bisvinylsulfonyl-2-propanol, 1,2-bis(vinylsulfonylacetamido)-ethane, bis(vinylsulfonylmethyl) ether, 1,3,5-triacryloyl-hexahydro-s-triazine, bis(vinylsulfonyl)methane, ~~2,4-dichloro-6-hydroxy-s-triazine, mucochloric acid,~~

~~mucophenoxychloric acid, an isoxazole compound, dialdehyde starch, and 2-chloro-6-hydroxytriazinylated gelatin~~.

22. (Currently amended) The method of claim 5, wherein said cross-linking agent is selected from the group consisting of ~~chrome alum, chromium acetate, formaldehyde, glyoxal, glutaraldehyde, dimethylolurea, methyloldimethylhydantoin, 2,3-dihydroxydioxane, carbenium, 2-napthalenesulfonate, 1,1-bispyrrolidino-1-chloro-, pyridinium, 1-morpholinocarbonyl-3-(sulfonatoaminomethyl)-~~, 1,3-bisvinylsulfonyl-2-propanol, 1,2-bis(vinylsulfonylacetamido)-ethane, bis(vinylsulfonylmethyl) ether, 1,3,5-triacryloyl-hexahydro-s-triazine, bis(vinylsulfonyl)methane~~, 2,4-dichloro-6-hydroxy-s-triazine, mucochloric acid, mucophenoxychloric acid, an isoxazole compound, dialdehyde starch, and 2-chloro-6-hydroxytriazinylated gelatin~~.